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In the Supreme Court of the United States

OCTOBER TERM, 1959

Nos. 2, 3, and 4, Original

STATES OF WISCONSIN, MINNESOTA, OHIO, PENNSYLVANIA, MICHIGAN AND NEW YORK, COMPLAINANTS

v.

STATE OF ILLINOIS AND THE SANITARY DISTRICT OF CHICAGO

No. 12, Original

STATE OF ILLINOIS

v.

STATES OF MICHIGAN, OHIO, PENNSYLVANIA, MINNESOTA, NEW YORK AND WISCONSIN

MOTION OF THE UNITED STATES OF AMERICA FOR LEAVE TO INTERVENE

The United States of America respectfully moves this Court for leave to intervene in the above-entitled causes and for leave to file the attached petitions of intervention for the reasons stated in the accompanying memorandum.

J. LEE RANKIN,
Solicitor General.

DECEMBER 1959.

In the Supreme Court of the United States

OCTOBER TERM, 1959

Nos. 2, 3, and 4, Original

STATES OF WISCONSIN, MINNESOTA, OHIO, PENNSYLVANIA, MICHIGAN AND NEW YORK, COMPLAINANTS

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No. 12, Original

STATE OF ILLINOIS

v.

STATES OF MICHIGAN, OHIO, PENNSYLVANIA, MINNESOTA, NEW YORK AND WISCONSIN

MEMORANDUM IN SUPPORT OF MOTION OF THE UNITED STATES OF AMERICA FOR LEAVE TO INTERVENE

PRELIMINARY STATEMENT

On June 29, 1959, the Court granted the amended application of complainants for a reopening of the decree of April 21, 1930, in Nos. 2, 3, and 4, Original, and granted also the motion of the State of Illinois for leave to file a bill of complaint in No. 15 (now No. 12), Original. The Court in the same order appointed Honorable Albert B. Maris as Special Master in each of these causes. 360 U.S. 712, 714.

By their amended application in Nos. 2, 3, and 4, Original, the complainants (the States of Wisconsin, Minnesota, Ohio, Pennsylvania, Michigan, and New York) ask that the defendants (the State of Illinois and the Metropolitan Sanitary District of Greater Chicago) be restrained from discharging any of the treated effluents emanating from the Sanitary District's sewage and industrial treatment facilities into the Chicago Sanitary and Ship Canal and that the said defendants be required to return all of said effluent to the Great Lakes Basin from which it originally came in the form of "domestic pumpage." The complainants ask alternatively that a Permanent Master be appointed and if it should be determined by the Court that measures other than the return to Lake Michigan of the Chicago domestic pumpage effluent can be put into effect so that such measures will either reduce the direct diversion or limit the Chicago domestic pumpage, to the end that the total amount of diversion from the Great Lakes at Chicago will be reduced or restricted, the Court enter a supplemental or modified decree to that effect.

The State of Illinois, by its complaint in No. 12, Original, invoked the original jurisdiction of this Court pursuant to Article III, Section 2, of the Constitution of the United States against the States of Michigan, Ohio, Pennsylvania, Minnesota, New York, and Wisconsin and asks the Court to declare that the State of Illinois and its instrumentality, the Elmhurst-Villa Park-Lombard Water Commission, are entitled to proceed with a program for the construction of a water supply system and the withdrawal of water

from Lake Michigan and further asks the Court to restrain the defendants from interfering with said construction and withdrawal.

INTERESTS OF THE UNITED STATES

The United States has numerous interests in the waters of the Great Lakes and St. Lawrence River watershed. These interests fall into the following main categories:

(1) Navigation on the Great Lakes, the St. Lawrence Seaway, and the Illinois Waterway.

(2) Maintenance of friendly relations with Canada.

(3) Hydro-electric power development on the Niagara and St. Lawrence Rivers within the United States.

(4) Protection of the property belonging to the United States in and adjacent to the Great Lakes and connecting rivers and waterways.

(5) Protection of public health and control of pollution of the Great Lakes and related interstate waters.

(6) Promoting the general welfare of all the United States in the utilization of the Great Lakes-St. Lawrence system as one of the great natural resources of the Nation.

1. The interest in and authority of the United States with respect to navigable waters makes any action which would impair navigability either of the Great Lakes, the St. Lawrence River, the Illinois Waterway or the Mississippi River a matter of federal concern.

The Great Lakes, as well as the Mississippi River, have from earliest times of our country been impor-

tant navigable waterways. The first connection of those two great waterways came in 1848 with the completion of the Illinois and Michigan Canal, joining the Chicago, Des Plaines and Illinois Rivers, the construction of which was aided by land grants from Congress.[1] Portions of the Illinois and Michigan Canal were later supplanted by the Chicago Sanitary and Ship Canal built by the Sanitary District of Chicago. By the Rivers and Harbors Act of July 3, 1930,[2] Congress appropriated funds for the completion of the Illinois Waterway and authorized the diversion of water from Lake Michigan in accordance with the decree of this Court of April 21, 1930,[3] for the navigation of such waterway. Freight commerce on the waterway has increased from 1,695,000 tons in 1935 when the waterway was first opened to 23,377,000 tons in 1956.[4]

United States commerce on the Great Lakes has likewise grown, reaching a peak during 1953 of 242,700,000 tons. A large portion of this commerce passed through the connecting channels; 122,724,000 tons passed through the St. Marys River and 140,729,000 tons passed through the Detroit River.[5] These channels, as well as the Straits of Mackinac, St. Clair River and Lake St. Clair are being deepened by the United States Corps of Engineers to a minimum depth of 27 feet, with 1962 the expected time of completion of a usable channel of that depth.

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[1] 278 U.S. 367, 401–402.
[2] 46 Stat. 918, 929.
[3] 281 U.S. 179.
[4] House Doc. 31, 86th Cong., 1st Sess., p. 8.
[5] S. Doc. 28, 85th Cong., 1st Sess., p. 42.

The St. Lawrence Seaway Project, a cooperative enterprise of Canada and the United States has resulted in the deepening of the St. Lawrence River as well as the Welland Canal between Lakes Ontario and Erie to the minimum depth of 27 feet. It is estimated that such facilities, opened for deep-draft navigation in 1959, will permit entry into the Great Lakes of 80 percent of the ships now engaged in world trade.[6]

2. Joint use of the Great Lakes-St. Lawrence system by United States and Canada is governed by various treaties and other understandings[7] between the two countries. In litigation to determine the legality of certain uses of waters of the Great Lakes within the United States, it is of concern to the United States that its obligations to Canada be fully and fairly represented to the Court.

3. Pursuant to orders of the International Joint Commission and licenses issued by the Federal Power Commission, the Power Authority of the State of New York has undertaken the construction of hydroelectric power projects on the Niagara and St. Lawrence Rivers to use all of the United States share

[6] H. Doc. 120, 86th Cong., 1st Sess., p. 25.

[7] Convention between the United States of America and Canada signed at Washington February 27, 1950, Treaties and Other International Acts, Series 2130; Treaty between the United States and Great Britain Relating to Boundary Waters, and Questions Arising between the United States and Canada, signed at Washington, January 11, 1909, 36 Stat. 2448; Agreement between the United States and Canada relating to the St. Lawrence Seaway Project for the construction of certain navigation facilities, Exchange of Notes at Ottawa, August 17, 1954, Treaties and Other International Acts, Series 3053.

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of the waters of those Rivers available for power generation. The power so generated will be sold to various users within the United States. Diversions out of the Great Lakes Basin reduce the amount of Niagara and St. Lawrence River water available for power generation by the Power Authority of the State of New York.

4. There are numerous Indian and other Federal reservations and facilities adjacent to and in the Great Lakes and connecting rivers and waterways. Insofar as No. 12 may establish principles of general application relative to the use of waters of the Great Lakes, such a precedent would be of concern to the United States with respect to such properties and facilities.

5. By the Act of June 30, 1948, as amended,[8] Congress has, in connection with the exercise of jurisdiction over the waterways of the Nation and in consequence of the benefits resulting to the public health and welfare in the preservation and control of water pollution, expressed the concern of the United States for the elimination or reduction of the pollution of interstate waters and tributaries thereof and improving the sanitary condition of surface and underground waters. Among other things, the Act provides a procedure by the United States, under the direction of the Surgeon General, for the abatement of pollution of interstate waters which endangers the health or welfare of persons in a State other than that in which the pollution occurs.

6. Apart from the specific interests referred to above, the utilization of the Great Lakes as one of the great

[8] 33 U.S.C. §§ 466–466k.

assets of the nation is of prime importance. Whatever may be the powers and rights of the individual states in these interstate waters, the people of the United States as a whole have a vital interest in the use of the Lakes and their maintenance as part of the essential geographic structure of the country.

CONCLUSION

In order to protect the foregoing interests, the United States believes that it should be permitted to intervene in these cases, and that the petitions of intervention which are attached hereto should be granted.

Respectfully submitted,

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Attorneys.

DECEMBER 1959.

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STATES OF WISCONSIN, MINNESOTA, OHIO, PENNSYLVANIA, MICHIGAN AND NEW YORK, COMPLAINANTS

v.

STATE OF ILLINOIS AND THE SANITARY DISTRICT OF CHICAGO

PETITION OF INTERVENTION OF THE UNITED STATES OF AMERICA

The United States of America for its Petition of Intervention in the above-entitled causes alleges as follows:

PART ONE: INTRODUCTION AND BACKGROUND

I

On June 29, 1959, the Court granted the amended application of complainants for a reopening of the decree of April 21, 1930.[1] The Court in the same order appointed Honorable Albert B. Maris as Special Master in these causes.[2]

[1] 281 U.S. 696.
[2] 360 U.S. 712.

II

The decree, of which modification is sought, by its terms in paragraph 3, under the circumstances then existing, enjoins the State of Illinois and the Sanitary District of Chicago from diverting, after December 31, 1938, "any of the waters of the Great Lakes-St. Lawrence system or watershed through the Chicago Drainage Canal and its auxiliary channels or otherwise in excess of the annual average of 1,500 cubic feet per second in addition to domestic pumpage."[3]

III

By their amended application, the complainants ask that the State of Illinois and the Metropolitan Sanitary District of Greater Chicago be restrained from discharging any of the treated effluents emanating from the District's sewage and industrial treatment facilities into the Sanitary and Ship Canal and be required to return all of said effluent to the Great Lakes Basin from which it originally came in the form of "domestic pumpage."

The complainants ask also that, if such decree is not made forthwith, a Special Master take evidence with respect to the issues raised by the amended application and with respect to whether the Court should appoint a Permanent Master invested with such authority as he may require for the purpose of maintaining surveillance over the operation of the sewers, interceptors and other sewage and water collecting facilities and the sewage disposal and industrial treat-

[3] 281 U.S. 697.

ment plants and works operated by the Metropolitan Sanitary District of Greater Chicago.

By a motion to amend and enlarge complainants' prayer for relief, complainants ask the Court alternatively to require measures other than return to Lake Michigan of the Chicago domestic pumpage effluent, which will either reduce the direct diversion or limit the Chicago domestic pumpage, to the end that the total amount of diversion of water from the Great Lakes at Chicago will be reduced or restricted.

IV

The defendants, in answer to the amended application of the complainants, deny its principal contentions and ask that it be dismissed and that the Court grant to the defendants such affirmative relief as may be warranted by the evidence to be presented.

Part Two: Description of the Great Lakes-St. Lawrence River Basin

V

The Great Lakes-St. Lawrence River Basin extends a distance of some 2,000 miles from the western end of the Lake Superior Basin in Minnesota, to the Gulf of St. Lawrence on the Atlantic Ocean. From east to west, the basin spans nearly one-half of the North American continent. The five Great Lakes, Superior, Michigan, Huron, Erie, and Ontario, with their connecting rivers and Lake St. Clair, have a water surface area of about 95,000 square miles above the head of the St. Lawrence River at the eastern end of Lake Ontario. The total area of the Great Lakes Basin,

both land and water, above the head of the St. Lawrence River is approximately 295,000 square miles. The international boundary between Canada and the United States passes through all of the Great Lakes and their connecting channels, with the exception of Lake Michigan which is entirely within the United States, and through the St. Lawrence River to a point near Cornwall, Ontario, where the boundary turns eastward to continue along a line between the State of New York and the Province of Quebec. Downstream of this point, the St. Lawrence River is entirely within Canada.

Based on records for the period 1860–1954, inclusive, the average water surface elevation and the average rate of outflow for each of the Lakes are as follows:

	Elevation (feet above sea level)	Outflow (cubic feet per second)
Lake Superior	602	75,000
Lake Michigan	580	48,000
Lake Huron	580	189,000
Lake Erie	572	205,000
Lake Ontario	246	241,000

The St. Lawrence River is the natural outlet for the entire drainage basin of the Great Lakes. From the outlet of Lake Ontario at Cape Vincent, N.Y., to Father Point, Quebec, which marks its transition into the Gulf of St. Lawrence, the river falls 246 feet in a distance of 533 miles. From Lake Ontario downstream 64 miles to Ogdensburg, N.Y., the river is gen-

erally wide and deep so that about one foot only of the fall occurs in this 64 miles. The major portion of the fall, some 225 feet, occurs in the next 120 miles extending from Ogdensburg to Montreal, Quebec. Most of the remaining 20 feet of fall occurs in the 160 miles between Montreal and the city of Quebec.

The natural supply of water to Lake Superior has been increased by diversions of water from the Albany River Basin through the Long Lake and Ogoki projects in Canada, beginning in 1940 and 1943 respectively.[4] Since 1945, the sum of these diversions has been at an average rate of about 5,000 cubic feet per second.

VI

Diversions of water from Lake Michigan and its drainage basin into the valley of the Des Plaines River, a tributary of the Illinois River within the Mississippi River Basin, have long been made.[5] Since 1938, the diversion through the Chicago Sanitary and Ship Canal has been at an annual average rate of approximately 1,500 cubic feet per second exclusive of domestic pumpage. Since 1930 domestic pumpage, according to records of the Metropolitan Sanitary District of Greater Chicago, has varied from an annual average rate of 1,700 cubic feet per second in 1930, to 1,575 in 1942, to 1,805 in 1956, and 1,760 in 1958.[6]

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[4] Arrangement between the United States and Canada relating to the early development of certain portions of the Great Lakes-St. Lawrence Basin project (Long Lac-Ogoki Works), Exchange of Notes at Washington, October 14 and 31 and November 7, 1940, 54 Stat. 2426.

[5] 278 U.S. 367, 399–404.

[6] A table of annual average rates of direct diversion and domestic pumpage is set out in defendants' Brief in Opposition to

PART THREE: NAVIGATION ON THE GREAT LAKES AND CONNECTING WATERWAYS AND THE ST. LAWRENCE SEAWAY

VII

Commerce on the Great Lakes has been a vital factor in development of the entire Great Lakes region.[7] The area tributary to the Lakes is rich in natural resources and has extensive fertile agricultural areas. The major portion of Great Lakes commerce passes between the Lakes. Ample depths for navigation are generally available in the open lakes. In their natural state the channels connecting Lakes Superior and Huron and Lakes Huron and Erie were very shallow for long reaches. Extensive dredging has been required in about 140 miles of these connecting channels to provide adequate depths for interlake navigation. In addition, the construction of locks was required near the head of the St. Marys River for navigation to bypass the 21-foot drop through the rapids at Sault Ste. Marie. The Straits of Mackinac connecting Lakes Michigan and Huron are wide and deep but dredging of several shoals has been necessary in the

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the Amended Application, p. 6. The Court authorized direct diversion of 10,000 c.f.s. for ten days, Dec. 2–12, 1940, pursuant to stipulation, to clear accumulated sewage deposits from the canal. 311 U.S. 107. It permitted up to 8,500 c.f.s., in the discretion of the Corps of Engineers, from Dec. 17, 1956, through Feb. 28, 1957, to aid navigation at the Alton Lock on the Mississippi. 352 U.S. 945; 352 U.S. 983. The Chief of Engineers permitted slightly excessive diversion in 1942 (1,528 c.f.s.) and 1944 (1,531 c.f.s.) as a war emergency measure in aid of navigation. See S. Doc. No. 28, 85th Cong., 1st Sess., p. 12.

[7] By Section 10 of the Rivers and Harbors Act of 1899, 30 Stat. 1121, 1151, Congress has exercised its jurisdiction to control diversions of water affecting navigable capacity of the Great Lakes system. 278 U.S. 367.

approaches to the straits to provide suitable channels for navigation.

VIII

The Great Lakes possess few natural harbors. Harbor improvements by the United States on the Great Lakes commenced in 1824 and have continued since that time to accommodate the increasing needs of navigation. There are now 56 federally improved deep-draft commercial harbors on the Great Lakes with depths of 18 feet or more. In addition, there are 9 privately improved harbors with depths of 21 feet or more.

IX

The Great Lakes connecting channels include the St. Marys River between Lakes Superior and Huron, the Straits of Mackinac between Lakes Huron and Michigan, and the St. Clair River, Lake St. Clair, and the Detroit River between Lakes Huron and Erie. The connecting channels with present controlling depths of 25 feet in the downbound channels and 21 feet in the upbound channels are being deepened by the United States to provide a controlling depth of 27 feet in both downbound and upbound channels. There are five locks at Sault Ste. Marie constructed to allow navigation to pass the rapids in the St. Marys River. There are four parallel locks on the United States side and a single lock in Canada.

Navigation passes between Lake Erie and Lake Ontario through the Welland Canal. This canal, constructed by and entirely within Canada, leaves Lake Erie 18 miles west of the head of the Niagara River and enters Lake Ontario 7½ miles west of the

mouth of that river. The canal has 1 guard lock and 7 lift locks with an aggregate lift of 326 feet.

X

Prior to the St. Lawrence Seaway Project undertaken by the United States and Canada, *infra*, paragraph XIV, the controlling depth of the St. Lawrence River was 14 feet from Montreal to Ogdensburg, New York. The seaway program deepened this reach of the River to 27 feet and supplanted 18 locks with 7 new locks. The St. Lawrence Seaway Project has involved also the deepening of the Welland Canal between Lakes Erie and Ontario from 25 to 27 feet.

Ocean-going vessels are thus able to enter the Great Lakes. Also, the eastern terminus of the Great Lakes vessels is extended from Ogdensburg, New York, to Seven Islands, Quebec, and to other points on the Gulf of St. Lawrence.

PART FOUR: NAVIGATION ON THE ILLINOIS WATERWAY

XI

The Illinois Waterway is a navigable waterway of the United States and provides a 9-foot depth navigation project between Lake Michigan and the Mississippi River system. It has two connections with Lake Michigan at Chicago, one at the mouth of the Chicago River and the other at the mouth of the Calumet River. Slack-water navigation is provided on the entire Illinois Waterway through a system of 8 locks and dams including the Alton lock and dam on the Mississippi River about 16 miles below the confluence of the Illinois and Mississippi Rivers. The water authorized by the decree herein of April 21,

1930, to be diverted from Lake Michigan has been authorized by Congress for navigation on this waterway. Rivers and Harbors Act of 1930, 46 Stat. 918, 929.

PART FIVE: INTERNATIONAL AGREEMENTS RESPECTING USE OF THE WATERS OF THE GREAT LAKES-ST. LAWRENCE SYSTEM

XII

INTERNATIONAL BOUNDARY WATERS TREATY OF 1909

On January 11, 1909, the United States and Great Britain entered into a treaty relating to boundary waters and questions arising between the United States and Canada. 36 Stat. 2448. In its preliminary article the Treaty defines boundary waters as "waters from main shore to main shore of the lakes and rivers and connecting waterways, or the portions thereof, along which the international boundary between the United States and the Dominion of Canada passes, including all bays, arms, and inlets thereof, but not including tributary waters which in their natural channels would flow into such lakes, rivers, and waterways, or waters flowing from such lakes, rivers, and waterways, or the waters of rivers flowing across the boundary."

By Article I the parties agreed that "the navigation of all navigable boundary waters shall forever continue free and open" to the inhabitants and vessels of both countries and that "this same right of navigation shall extend to the waters of Lake Michigan." Under Article II, there was reserved to the respective parties, or to the several state governments on the one side and the Dominion or Provincial governments on

the other, exclusive control over the use and diversion of all waters on its own side of the boundary line which in their natural channels would flow across the boundary or into boundary waters, but it was agreed that any interference with or diversion from their natural channel of waters on either side of the boundary "shall give rise to the same rights and entitle the injured parties to the same legal remedies as if such injury took place in the country where such diversion or interference occurs." Article II further provides that neither party surrenders any right "which it may have, to object to any interference with or diversions of waters on the other side of the boundary the effect of which would be productive of material injury to the navigation interests on its own side of the boundary."

Article VII of the Treaty provided for the establishment of an International Joint Commission which, by Article VIII, was empowered to pass upon all cases involving "the use or obstruction or diversion of the waters with respect to which under Articles III and IV of this treaty the approval of this Commission is required." Article VIII sets forth certain rules or principles to govern the International Joint Commission including the following order of precedence of uses:

(1) Uses for domestic and sanitary purposes;

(2) Uses for navigation, including the service of canals for the purposes of navigation;

(3) Uses for power and for irrigation purposes.

As to boundary waters, it was agreed by Article III that, in addition to cases provided for by special agreement, "no further or other uses or obstructions or diversions, whether temporary or permanent" of such waters "on either side of the line, affecting the natural level or flow of boundary waters on the other side of the line, shall be made except by authority" of the two countries "within their respective jurisdictions and with the approval" of the International Joint Commission. Article III further provides that the Treaty does not limit the right of the respective governments to undertake certain governmental works for the benefit of commerce and navigation provided that such works are wholly on the respective sides of the line and do not materially affect the level or flow of the boundary waters on the other side of the line, and that the Treaty does not interfere with the ordinary use of boundary waters for domestic and sanitary purposes.

By Article IV it was agreed that, except in cases provided for by special agreement, the parties "will not permit the construction or maintenance on their respective sides of the boundary of any remedial or protective works or any dams or other obstructions in waters flowing from boundary waters or in waters at a lower level than the boundary in rivers flowing across the boundary, the effect of which is to raise the natural level of waters on the other side of the boundary unless the construction or maintenance thereof is approved by the * * * International Joint Commission." By Article IV it was further agreed that "boundary waters and waters flowing across the boundary shall not be polluted on either side to the injury of health or property on the other."

XIII

NIAGARA RIVER TREATY

On February 27, 1950, Canada and the United States entered into a treaty concerning the uses of the waters of the Niagara River,[9] such treaty replacing certain of the specific provisions of the Treaty of January 11, 1909, relative to the Niagara River. The 1950 Treaty established minimum rates of flow over Niagara Falls in order to preserve their scenic beauty. The treaty provided further that each Government could license power use of half of the total remaining outflow of Lake Erie, excepting the amount of water used and necessary for domestic and sanitary purposes and for the service of canals for the purposes of navigation and excepting also water brought into the Great Lakes System by the Long Lake-Ogoki diversion of Canada.

XIV

UNITED STATES-CANADIAN UNDERSTANDINGS RELATIVE TO THE ST. LAWRENCE SEAWAY

Pursuant to parallel legislation by the Congress of the United States[10] and the Parliament of Canada[11] and an agreement embodied in an exchange of notes, dated August 17, 1954,[12] the two governments have undertaken the construction of the St. Lawrence Seaway, Lake Erie to Montreal, through the St. Lawrence

[9] Treaties and Other International Acts, Series 2130.

[10] Act of May 13, 1954; 68 Stat. 92.

[11] Act of December 21, 1951; Canadian Revised Statutes (1952), Ch. 242.

[12] Treaties and Other International Acts, Series 3053.

Seaway Development Corporation, a United States Government corporation, and a similar Canadian Government entity, the St. Lawrence Seaway Authority.

Part Six: Hydroelectric and Related Development of the Niagara and St. Lawrence Rivers and the Illinois Waterway

XV

Along the Niagara River in the vicinity of Niagara Falls, there are hydroelectric plants in Canada and the United States. These plants take water from the Niagara River above the falls and return it to the river below the falls.

As above noted in paragraph XIII, the treaty of February 27, 1950, between the Governments of Canada and the United States replaces certain provisions of the Treaty of 1909 respecting the Niagara River. By the Act of August 21, 1957,[12] Congress directed the Federal Power Commission to license the Power Authority of the State of New York to construct and operate a power project "with capacity to utilize all of he United States share of the water of the Niagara River permitted to be used by international agreement." The Power Authority of the State of New York has proceeded with construction under license issued by the Federal Power Commission in pursuance of that direction.

The International Joint Commission gave permission for the development of power in the International Rapids Section of the St. Lawrence River by Canada

[12] 71 Stat. 401.

and the United States,[13] and established criteria for the operation of the project so authorized in the interest of regulating outflows from Lake Ontario and water surface levels on Lake Ontario and the St. Lawrence River. On July 15, 1953, the Federal Power Commission licensed the Power Authority of the State of New York to construct and operate the United States portion of the project.[14] On November 4, 1953, the President of the United States designated the Power Authority of the State of New York as the agency to construct the United States portion of the project under the approval given by the International Joint Commission.[15] The Power Authority of the State of New York, on the United States side, and the Hydro-Electric Power Commission of Ontario, on the Canadian side, have proceeded with the construction of power development in the International Rapids section of the St. Lawrence River.

There are additional power projects on the St. Lawrence River constructed and operated by Canadian interests downstream from the International Rapids section.

On the Illinois Waterway there are hydroelectric power plants near Lockport and Marseilles, Illinois. Neither of these plants has been licensed under the Federal Power Act, and the question of the applicability of that Act to their operation has not been judicially determined.

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[13] Order of Approval of November 29, 1952 (S. Doc. No. 165, 83rd Cong., 2d Sess., pp. 137–143) as supplemented by Order of July 2, 1956 (35 State Dept. Bull., pp. 227–229).

[14] S. Doc. No. 165, 83rd Cong., 2d Sess., pp. 150–156.

[15] Executive Order No. 10500, 18 Fed. Reg. 7005.

Part Seven: Property Interests of the United States

XVI

There are numerous Indian and other Federal reservations and facilities adjacent to and in the Great Lakes and connecting rivers and waterways. Such properties of the United States require water of the Great Lakes system for navigational, domestic, industrial, sanitary and other useful purposes.

Part Eight: The Public Interest in Pollution Control and Interests of the United States Related to the General Welfare of All the People

XVII

The waters of the Great Lakes system constitute a national and international resource of great value. As such, their use is subject to national and international planning and control. Such use within the United States must of necessity be compatible with the best interests of all the people of the United States and with the interests of Canada as determined by international agreement.

XVIII

As above noted, the Treaty of 1909 between the United States and Great Britain fixes, for certain purposes, an order of precedence among various uses for domestic and sanitary purposes, navigation, power and irrigation, of the waters therein defined as boundary waters and stipulates that no use shall be permitted which tends materially to conflict with or pe-

strain any other use which is given preference over it. That treaty also provides against the pollution of boundary waters or waters flowing across the boundary to the injury of health or property on the other side of the boundary. Additional agreements and arrangements between the United States and Canada respecting use of the waters of the system are noted in Parts Five and Six, *supra*.

XIX

By the Act of June 30, 1948, as amended,[16] Congress has, in connection with the exercise of jurisdiction over the waterways of the Nation and in consequence of the benefits resulting to the public health and welfare in the preservation and control of water pollution, expressed the concern of the United States for the elimination or reduction of the pollution of interstate waters and tributaries thereof and improving the sanitary condition of surface and underground waters. Among other things, the Act provides a procedure by the United States, under the direction of the Surgeon General, for the abatement of pollution of interstate waters which endangers the health or welfare of persons in a State other than that in which the pollution occurs.

PART NINE: THE EFFECTS OF THE DIVERSIONS FROM LAKE MICHIGAN UPON THE VARIOUS INTERESTS OF THE UNITED STATES

XX

Any diversion of water out of the Lake Michigan watershed decreases the levels of the water surface

[16] 33 U.S.C. §§ 466–466k.

which would otherwise prevail in that lake and in Lakes Huron, Erie, and Ontario, and in the connecting waterways. The quantitative effect of any such diversion on lake levels is dependent upon the duration and quantity of the diversion. A permanent additional diversion of 1,000 cubic feet per second would have the ultimate effect of lowering the water surface level of Lakes Michigan and Huron and connecting waterways about one inch and of Lakes Erie and Ontario and connecting waterways about 5/8 inch. A permanent decrease in the present diversion by the same amount would ultimately result in a raising of the lake levels to about the same extent. The ultimate effect on lake levels of a permanent increase or decrease in the diversion in an amount more or less than 1,000 cubic feet per second would be in direct mathematical proportion to the effect of an increase or decrease in the amount of 1,000 cubic feet per second. A measurable adverse effect upon the interests of navigation on the Great Lakes system would result from a permanent increased diversion of as much as 1,000 cubic feet per second. Similar effects would result from a smaller permanent increase but, depending upon the size of the increase, the overall effect may not be capable of evaluation.

On the other hand, the diversion of water out of Lake Michigan into the Illinois Waterway is necessary for the maintenance of navigation on that waterway. The flow of 1,500 cubic feet per second, exclusive of domestic pumpage, is authorized for navigation by the decree of April 21, 1930. An aver-

age annual flow of this rate, without domestic pumpage, is adequate for operation of existing navigation facilities on the Illinois Waterway.

The construction of duplicate locks on that Waterway has been recommended to Congress by the Chief of Engineers.[17] Studies of water requirements for operation of the recommended duplicate locks show that an average annual flow of 1,826 cubic feet per second would be required.

XXI

Any diversion of water from Lake Michigan, if continued permanently, reduces the outflows of Lakes Erie and Ontario in approximately the same quantity as the amount of the diversion. Thus water diverted at Chicago is not available for hydro-electric power production at the plants within the United States and Canada on the Niagara River and in the International Rapids section of the St. Lawrence River, and in Canada downstream from the International Rapids on the St. Lawrence. Any increase in the diversion at Chicago will adversely affect the production of power at those plants and any decrease will be beneficial to power production there.

XXII

There is a present practice of discharging industrial wastes, treated sewage effluents, and untreated raw sewage in times of storm runoff, into the Illinois Waterway, which results in pollution of the waterway. The interest of the United States in the control of

[17] H. Doc. No. 31, 86th Cong., 1st Sess.

pollution of interstate waters and waters tributary thereto is affected thereby. Likewise, without more complete purification of sewage effluents than presently achieved by the Metropolitan Sanitary District of Greater Chicago, the demand of the complainant States for the return of the sewage effluents and industrial wastes to Lake Michigan poses a possibility of pollution of the waters of Lake Michigan. That demand requires that consideration be given to factors relevant to determining the public interest in maintaining the purity of the waters of Lake Michigan *vis-a-vis* pollution of the Illinois Waterway.

Part Ten: The Necessity for Intervention by the United States

XXIII

Because of the appropriate self-interest of the party States and the Metropolitan Sanitary District of Greater Chicago in the use of the national and international resource here involved, they are unable, either separately or collectively, fully to assert and represent the interests of all the United States in the matters in controversy. In order that such interests may be protected it is necessary that the United States intervene as a party to these cases.

Part Eleven: Response to Pleadings of Other Parties

XXIV

The United States does not plead specifically to the allegations of the parties as set forth in the amended application of the complainant States and the answer

thereto of the defendants. However, this omission to so plead does not constitute an admission by the United States of any allegation of fact or legal conclusion contained in said application and answer.

PRAYER

WHEREFORE, the United States of America prays that the facts relevant to the issues raised by the amended application of the complainant States, the answer thereto of the defendants, and this petition in intervention be determined; that the rights of the parties in the light of those facts and in the light of the rights, interests, and obligations of the United States be determined; and that appropriate disposition of the complainants' demand for modification of the decree herein or for the entry of a supplemental decree be made, having due regard for the effect of such disposition on the rights, interests, and obligations of the United States.

J. LEE RANKIN,
Solicitor General.

DECEMBER 1959.

In the Supreme Court of the United States

OCTOBER TERM, 1959

No. 12, Original

STATE OF ILLINOIS

v.

STATES OF MICHIGAN, OHIO, PENNSYLVANIA, MINNESOTA, NEW YORK AND WISCONSIN

PETITION OF INTERVENTION OF THE UNITED STATES OF AMERICA

The United States of America, for its Petition of Intervention in the above-entitled cause, alleges as follows:

PART ONE: INTRODUCTION AND BACKGROUND

I

The State of Illinois, as complainant, has invoked the original jurisdiction of this Court pursuant to the provisions of Article III, Section 2, of the Constitution of the United States. The purpose of its action is (1) to establish by declaratory judgment the right of the State of Illinois through its instrumentality, the Elmhurst-Villa Park-Lombard Water Commission, to withdraw water from Lake Michigan for the domestic purposes of the three municipalities organizing the Commission and for the domestic purposes of

other customers of said Commission located along the line of its proposed water main, and (2) to enjoin the defendants from interfering with the exercise of such rights. Illinois' motion for leave to file a bill of complaint was granted on June 29, 1959.[1]

II

The State of Wisconsin, joined by the State of Minnesota, in answer to the Bill of Complaint, denied the principal contentions of the State of Illinois and moved that said Complaint be dismissed.

III

The States of Michigan, Ohio, Pennsylvania and New York answered the Bill of Complaint, denying the principal contentions of the State of Illinois, and asserting certain affirmative defenses and counterclaims for affirmative relief. By such pleadings the issue is raised whether the enforcement of such right as Illinois may have to withdraw water from Lake Michigan for municipalities situated outside the Great Lakes watershed should be conditioned:

(a) upon the return to Lake Michigan of the residue after use and appropriate treatment of the water, or

(b) upon the institution of other measures adequate to compensate other Great Lakes states, either in money or in substitute water, for any loss by reason of the withdrawal of such water from Lake Michigan.

[1] 360 U.S. 712, 714.

IV

The State of Illinois replied to the counterclaims of the State of New York, as well as to the counterclaims of the States of Michigan, Ohio, and Pennsylvania.

PARTS TWO THROUGH EIGHT: PARAGRAPHS V THROUGH XIX

V–XIX

Paragraphs V through XIX of the Petition in Intervention on behalf of the United States of America in *Wisconsin et al.* v. *Illinois et al.*, Nos. 2, 3, and 4, Original, are incorporated herein by reference and made a part hereof as Paragraphs V through XIX.

PART NINE: THE EFFECTS OF THE DIVERSIONS FROM LAKE MICHIGAN UPON THE VARIOUS INTERESTS OF THE UNITED STATES

XX

Any diversion of water out of the Lake Michigan watershed decreases the levels of the water surface which would otherwise prevail in that lake and in Lakes Huron, Erie, and Ontario, and in the connecting waterways. The quantitative effect of any such diversion on lake levels is dependent upon the duration and quantity of the diversion. A permanent additional diversion of 1,000 cubic feet per second would have the ultimate effect of lowering the water surface level of Lakes Michigan and Huron and connecting waterways about one inch and of Lakes Erie and Ontario and connecting waterways about $\frac{5}{8}$ inch. The ultimate effect on lake levels of a permanent

increase in the diversion in an amount more or less than 1,000 cubic feet per second would be in direct mathematical proportion to the effect of an increase in the amount of 1,000 cubic feet per second. A measurable adverse effect upon the interests of navigation on the Great Lakes system would result from a permanent increased diversion of as much as 1,000 cubic feet per second.

Although the effect on lake levels, and, in turn, on the interests of navigation and on properties adjacent to and in the Great Lakes and the connecting waterways of the diversion out of the watershed of the quantity of Lake Michigan waters contemplated by Illinois on behalf of the Elmhurst-Villa Park-Lombard Water Commission may not be capable of evaluation independently, the combined effect of it and other withdrawals from Lake Michigan in Illinois is measurable.

XXI

Any diversion of water from Lake Michigan, if continued permanently, reduces the outflows of Lakes Erie and Ontario in approximately the same quantity as the amount of the diversion. Thus water diverted by Illinois is not available for hydro-electric power production at the plants within the United States and Canada on the Niagara River and in the International Rapids section of the St. Lawrence River, and in Canada downstream from the International Rapids on the St. Lawrence. Any increase in the diversion by Illinois will adversely affect the production of power at those plants.

XXII

The demand of the defendant States for the return to Lake Michigan of the sewage effluent from water diverted by Illinois for the Elmhurst-Villa Park-Lombard Water Commission as a condition of such diversion poses the possibility, when considered with the relief demanded in Nos. 2, 3, and 4, Original, of pollution of the waters of Lake Michigan.

PART TEN: THE NECESSITY FOR INTERVENTION BY THE UNITED STATES

XXIII

Because of the appropriate self-interest of the party States in the use of the national and international resource here involved, they are unable, either separately or collectively, fully to assert and represent the interests of all the United States in the matters in controversy. In order that such interests may be protected it is necessary that the United States intervene as a party to this case.

PART ELEVEN: RESPONSE TO PLEADINGS OF OTHER PARTIES

XXIV

The United States does not plead specifically to the allegations of the parties as set forth in the complaint of the complainant, answers and counterclaims of the defendants and the reply of the complainant. However, this omission to so plead does not constitute an admission by the United States of any allegation of fact or conclusion of law contained in said complaint, answers, counterclaims and reply.

PRAYER

WHEREFORE, the United States of America prays that the facts relevant to the issues raised by the complaint, answers, counterclaims and reply, and this petition in intervention be determined; that the rights of the parties in the light of those facts and in the light of the rights, interests, and obligations of the United States be determined; and that appropriate disposition of the various claims herein be made, having due regard for the effect of such disposition on the rights, interests, and obligations of the United States.

J. LEE RANKIN,
Solicitor General.

DECEMBER 1959.

U.S. GOVERNMENT PRINTING OFFICE: 1959